



1600

**RAW SEQUENCE LISTING**

PATENT APPLICATION: US/09/980,116

DATE: 11/05/2003

TIME: 13:46:58

Input Set : A:\2923-514.txt

Output Set: N:\CRF4\11052003\I980116.raw

3 <110> APPLICANT: Apfel, Heiko  
 4 Fuchs, Thilo  
 5 Gibbs, Carol  
 6 Hueck, Christoph  
 7 Meyer, Thomas  
 9 <120> TITLE OF INVENTION: Essential Genes and Gene Products for Identifying,  
 Developing and  
 10 Optimizing Immunological and Pharmacological Active Ingredients  
 11 for the Treatment of Microbial Infections  
 13 <130> FILE REFERENCE: 2923-514  
 15 <140> CURRENT APPLICATION NUMBER: 09/980,116  
 16 <141> CURRENT FILING DATE: 2001-11-30  
 18 <160> NUMBER OF SEQ ID NOS: 263  
 20 <170> SOFTWARE: PatentIn version 3.2

**ERRORED SEQUENCES**

**Does Not Comply**  
**Corrected Diskette Needed**

25848 <210> SEQ ID NO: 263  
 25849 <211> LENGTH: 294  
 25850 <212> TYPE: PRT  
 25851 <213> ORGANISM: Artificial Sequence  
 25853 <220> FEATURE:  
 25854 <223> OTHER INFORMATION: vector construct  
 25856 <400> SEQUENCE: 263  
 25858 Met Arg Gly Ser His His His His His His Gly Met Ala Ser Met Thr  
 25859 1 5 10 15  
 25862 Gly Gly Gln Gln Met Gly Arg Asp Leu Tyr Asp Asp Asp Asp Lys Asp  
 25863 20 25 30  
 25866 Leu His Met Phe Ile Ile Pro Ser Arg Ser Met Val Gly Thr Leu Tyr  
 25867 35 40 45  
 25870 Glu Gly Asp Met Leu Phe Val Lys Lys Phe Ser Tyr Gly Ile Pro Ile  
 25871 50 55 60  
 25874 Pro Lys Ile Pro Trp Ile Glu Leu Pro Val Met Pro Asp Phe Lys Asn  
 25875 65 70 75 80  
 25878 Asn Gly His Leu Ile Glu Gly Asp Arg Pro Lys Arg Gly Glu Val Val  
 25879 85 90 95  
 25882 Val Phe Ile Pro Pro His Glu Lys Lys Ser Tyr Tyr Val Lys Arg Asn  
 25883 100 105 110  
 25886 Phe Ala Ile Gly Gly Asp Glu Val Leu Phe Thr Ser Glu Gly Phe Tyr  
 25887 115 120 125  
 25890 Leu His Pro Phe Glu Ser Gly Thr Asp Lys Thr Tyr Ile Ala Lys His  
 25891 130 135 140  
 25894 Tyr Pro Asp Ala Met Thr Lys Glu Phe Met Gly Lys Ile Phe Val Leu

## RAW SEQUENCE LISTING

DATE: 11/05/2003

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TIME: 13:46:59

Input Set : A:\2923-514.txt

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25895 145                      150                      155                      160
25898 Asn Pro Tyr Lys Ser Lys His Pro Gly Ile His Tyr Gln Lys Asp Asn
25899                      165                      170                      175
25902 Glu Thr Phe His Leu Met Glu Gln Leu Ala Thr Gln Gly Ala Glu Ala
25903                      180                      185                      190
25906 Asn Ile Ser Met Gln Leu Ile Gln Met Glu Gly Glu Lys Val Phe Tyr
25907                      195                      200                      205
25910 Lys Lys Ile Asn Asp Asp Glu Phe Phe Met Ile Gly Asp Asn Arg Asp
25911                      210                      215                      220
25914 Asn Ser Ser Asp Ser Arg Phe Trp Gly Ser Val Ala Tyr Lys Asn Ile
25915 225                      230                      235                      240
25918 Val Gly Ser Pro Trp Phe Val Tyr Phe Ser Leu Ser Leu Lys Asn Ser
25919                      245                      250                      255
25922 Leu Glu Met Asp Ala Glu Asn Asn Pro Lys Lys Arg Tyr Leu Val Arg
25923                      260                      265                      270
25926 Trp Glu Arg Met Phe Lys Ser Val Glu Gly Leu Glu Lys Ile Ile Lys
25927                      275                      280                      285
25930 Lys Glu Lys Ala Thr His
25931                      290

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E--&gt; 25937 469

## VERIFICATION SUMMARY

DATE: 11/05/2003

PATENT APPLICATION: US/09/980,116

TIME: 13:47:00

Input Set : A:\2923-514.txt

Output Set: N:\CRF4\11052003\I980116.raw

L:13671 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117 after pos.:48  
M:341 Repeated in SeqNo=117  
L:13760 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118 after pos.:16  
L:14063 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:121  
L:14063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121 after pos.:1104  
L:14217 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:122 after pos.:352  
L:14309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:123 after pos.:288  
M:341 Repeated in SeqNo=123  
L:14382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124 after pos.:96  
L:14474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125 after pos.:480  
M:341 Repeated in SeqNo=125  
L:14538 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:126 after pos.:160  
L:14760 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:129  
L:14760 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:1248  
M:341 Repeated in SeqNo=129  
L:14949 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:130 after pos.:400  
M:341 Repeated in SeqNo=130  
L:15057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:288  
M:341 Repeated in SeqNo=131  
L:15136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:132 after pos.:96  
L:16337 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:147  
L:16337 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:147 after pos.:49  
L:16409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:148 after pos.:0  
L:19417 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:175  
L:19417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175 after pos.:576  
M:341 Repeated in SeqNo=175  
L:19530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:176 after pos.:176  
M:341 Repeated in SeqNo=176  
L:19642 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:177  
L:19642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:177 after pos.:624  
M:341 Repeated in SeqNo=177  
L:19717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:178 after pos.:192  
M:341 Repeated in SeqNo=178  
L:20079 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:183 after pos.:48  
M:341 Repeated in SeqNo=183  
L:20164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:184 after pos.:16  
L:20417 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:187  
L:20417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:187 after pos.:240  
M:341 Repeated in SeqNo=187  
L:20574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:188 after pos.:64  
M:341 Repeated in SeqNo=188  
L:20843 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:191  
L:20843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:191 after pos.:48  
L:20937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:192 after pos.:0  
L:21531 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:197  
L:21531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:197 after pos.:1152  
M:341 Repeated in SeqNo=197  
L:21676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:198 after pos.:368

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M:341 Repeated in SeqNo=198

L:21728 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:199

L:21728 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:199 after pos.:96

M:341 Repeated in SeqNo=199

L:21805 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:200 after pos.:16

M:341 Repeated in SeqNo=200

L:22012 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:203

L:22012 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:528

L:22080 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:160

L:22891 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:213

L:22891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:213 after pos.:432

M:341 Repeated in SeqNo=213

L:22977 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:214 after pos.:128

L:23077 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:215

L:24005 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:227

L:24791 M:258 W: Mandatory Feature missing, &lt;223&gt; Tag not found for SEQ ID#:239

L:25937 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:263